

CLAIMS

1. Use of a conversion agent to prepare from a food material a foodstuff comprising at least one functional ingredient, wherein the at least one functional ingredient has been generated from at least one constituent of the food material by the conversion agent.

2. A process for preparing a foodstuff comprising the steps of
(i) providing a food material;
10 (ii) contacting the food material with a conversion agent such that a functional ingredient is generated by the conversion agent from at least one constituent of the food material.

3. A foodstuff prepared from a food material, wherein the foodstuff comprises at least one functional ingredient, and wherein the at least one functional ingredient has been generated from at least one constituent of the food material by a conversion agent.

4. Invention according to claim 1, 2 or 3 wherein the conversion agent is present in the foodstuff.

20 5. Invention according to any one of the preceding claims wherein the conversion agent is a catalyst.

6. Invention according to claim 5 wherein the conversion agent is an enzyme.

25 7. Invention according to claim 6 wherein the enzyme is selected from lipase, esterase, derivatives and mixtures thereof.

8. Invention according to claim 6 or 7 wherein the enzyme is isolated from a plant, an animal or a micro-organism.

30 9. Invention according to claim 8 wherein the micro-organism is selected from

Aspergillus niger, Rhizopus delemar, Rhizopus arrhizus, Mucor miehei, Pseudomonas sp., Candida rugosa, Pencillum roqueforti, Pencillum cyclopium, Aspergillus tubingensis, Candida cylindracea, Thermomyces lanuginosus, Mucor javanicus, Candida antarctica, Chromobacterium viscosum, Pseudomonas fluorescens, 5 Pseudomonas nitroreducans, Chromobacterium viscosum, Bacillus subtilis mutants and combinations thereof.

10. Invention according to any one of the preceding claims wherein the conversion agent is present in an inactive form or a denatured form in the foodstuff.

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11. Invention according to any one of the preceding claims wherein the at least one constituent of the food material is selected from esters, monoglycerides, diglycerides, triglycerides, fats, including lard, tallow and butter fat; fatty acids, fatty acid esters, waxes, wax esters, oils including oils extracted from or derived from palm oil, sunflower oil, soya bean oil, safflower oil, cotton seed oil, ground nut oil, corn oil, olive oil, peanut oil, coconut oil and rape seed oil, proteins, amino acids, protein hydrolysates, peptides (partly hydrolysed protein), a constituent comprising a hydroxy group (-OH), polyvalent alcohols, including glycerol; water, ethanol, sugars including sucrose, fructose, glucose (dextrose), lactose, and galactose; dextrans including maltodextrin, 15 sorbitol, mannitol, fruit acids and hydroxy acids including citric acid, tartaric acid, lactic acid and ascorbic acid; proteins, amino acids, protein hydrolysates, peptides (partly hydrolysed protein); mixtures and derivatives thereof.

20 12. Invention according to claim 11 wherein the at least one constituent of the food material is selected from monoglycerides, diglycerides, and mixtures thereof.

25 13. Invention according to any one of the preceding claims wherein the functional ingredient is generated from at least two constituents of the food material.

30 14. Invention according to any one of the preceding claims wherein the functional ingredient is generated from a first constituent and a second constituent of the food material.

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15. Invention according to claim 14 wherein the first constituent and the second constituent are constituents of the foodstuff.

5 16. Invention according to claim 14 or 15 wherein the first constituent is hydrophobic and/or lipophilic.

17. Invention according to any one of claims 14 to 16 wherein the first constituent is selected from fats, oils, fatty acids, derivatives and mixtures thereof.

10 18. Invention according to any one of claims 14 to 17 wherein the second constituent is hydrophilic.

15 19. Invention according to any one of claims 14 to 18 wherein the second constituent is selected from a constituent comprising a hydroxy group (-OH), polyvalent alcohols, including glycerol; water, ethanol, sugars including sucrose, fructose, glucose (dextrose), lactose, and galactose; dextrins including maltodextrin, sorbitol, mannitol, fruit acids and hydroxy acids including citric acid, tartaric acid, lactic acid and ascorbic acid; mixtures and derivatives thereof.

20 20. Invention according to claims 14 to 18 wherein the second constituent is selected from proteins, amino acids, protein hydrolysates, peptides (partly hydrolysed protein), derivatives and mixtures thereof.

25 21. Invention according to any one of the preceding claims wherein the foodstuff is selected from baked goods, including breads, cakes, muffins, doughnuts, biscuits, crackers and cookies; confectionery, including candies, caramels, chocolate and puddings; frozen products, preferably frozen dairy products, including ice cream and ice milk; dairy products, including coffee cream, whipped cream, custard cream, milk drinks and yoghurts; meat products, including processed meat products; edible oils and fats, including w/o emulsions, o/w emulsions, margarine shortening and spreads; fine foods, including sauces and mayonnaise.

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22. Invention according to claim 1 wherein the foodstuff comprises at least two functional ingredients, and wherein the at least two functional ingredient have been generated from a first constituent of the food material and a second constituent of the food material by a conversion agent.

23. Invention according to claim 22 wherein the first constituent is a constituent comprising at least two ester groups, preferably a triester, more preferably a triglyceride.

10 24. Invention according to claim 22 or 23 wherein the second constituent is a sugar or a sugar alcohol, more preferably ascorbic acid.

15 25. Invention according to any one of the preceding claims wherein the at least one functional ingredient comprises or is an emulsifier.

26. Invention according to claim 25 wherein the emulsifier is selected from monoglycerides, diglycerides, and mixtures thereof.

27. Use according to claim 1 substantially as hereinbefore described.

20 28. Process according to claim 2 substantially as hereinbefore described.

29. Foodstuff according to claim 3 substantially as hereinbefore described.

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